IPC ASSOCIATION CONNECTINE ELECTRONICS INDUSTRIE	Material Composi © Copyright 2005. IPC, international and Pan-Ar	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.									
752-21.1	IPC Web Site for Information on IPC-1752 Standard Form Type http://www.ipc.org/IPC-175x Distribute				Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No. Homogeneous Materi					ials and Mfc Information				
Supplier Inforn												-			
Company name*			Company unique ID			Uniqu	Unique ID Authority					Response Date*			
onsemi											2024-05-09				
Contact Name			Title - Contact			Phone	Phone - Contact*				Email - Contact*				
Product-Env-Stewa	ards		Product Enviro Compliance			NA	NA				Product-Env-Stewards@onsemi.com				
uthorized Represe	entative*	Title - Representative			Phone	Phone - Representative*				Email - Representative*					
Product-Env-Stewa	ards	Product Enviro Compliance			NA	NA				Product-Env-Stewards@onsemi.com					
Requesto	Requester Item Number Mfr Ite		em Number Mfr Item Name			Effe	ective Date	Version	Yersion Manufacturing Site			Weight*	UOM	Unit Type	
		NCP13992AHDR2G High Perf Current Mod with Integrated HV Dr.			ller 2024	4-05-09		PH1			179.58	mg	Each		
<b>Ianufacturing</b>	Process Information	n													
Terminal Plating / Grid Array Material			Ferminal Base Alloy J-STD-020 MSL		-STD-020 MSL Rating		Peak Process Body Temperature Max Time at I		re Max Time at Peak	Temperat	ure Num	ber of Reflow Cyc	eles		
Matte Tin (Sn) - annealed		C	CU Alloy 3		}		260 C 30		30	secon	ıds 3				
omments															
TTENTION: MSI	L 3 Rated item requires Ba	ake and Di	ry Pack (after	electrical test)											
or more informati	on regarding material con	nposition p	olease refer to	page 3											

RoHS Material Composition Declaration			Declaration Type *	Detail	ed						
Directive 2015/863/EU amending RoHS Directive 2011/65/EU  RoHS Definition: Quantity limit of 0.01% by mass (100 PPM) in homogeneous material for Cadmium and quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Bis(2-ethylhexyl) phthalate (DEHP), Benzyl-butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).											
Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2011/65/EU and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalentchromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a "RoHS restricted substance") in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance inexcess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier have provided as part of that agreement, will be the sole and exclusivesource of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.											
RoHS Declaration * 1 - Item	(s) does not contain RoHS restricted substar	nces per the definition above	Supplier A	cceptance *	Accepted						
Exemption: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.											
Exemption List Version	EL-2011/534/EU										
Declaration Signature											
		e "Accepted" on the Supplier Acceptance	drop-down. This will display the signature a	rea. Digitally sign t	the declaration (if required by the						

## **Homogeneous Material Composition Declaration for Electronic Products**

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

<b>Homogeneous Material</b>	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	5.37	mg	Supplier	Silicon (Si)	7440-21-3		5.37	mg
Die Attach	0.58	mg	Supplier	Organic peroxide	3006-86-8		0.0043	mg
			Supplier	Diluent B	Proprietary Data		0.029	mg
			Supplier	Diluent A	Proprietary Data		0.0232	mg
			Supplier	Dicyandiamine	461-58-5		0.0014	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		0.464	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.058	mg
Lead Frame	70.13	mg	Supplier	Silver (Ag)	7440-22-4		0.561	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0842	mg
			Supplier	Iron (Fe)	7439-89-6		1.6481	mg
			Supplier	Copper (Cu)	7440-50-8		67.8157	mg
			Supplier	Phosphorus (P)	7723-14-0		0.021	mg
Mold Compound-Black	101.52	mg		Epoxy resin	proprietary data		5.076	mg
			Supplier	Phenolic Resin	Proprietary Data		2.0304	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		2.538	mg
			Supplier	Carbon Black (C)	1333-86-4		0.5076	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		91.368	mg
Plating	1.87	mg	Supplier	Tin (Sn)	7440-31-5		1.87	mg
Wire Bond	0.11	mg	Supplier	Palladium (Pd)	7440-05-3		0.0023	mg
			Supplier	Gold (Au)	7440-57-5		0.0003	mg
			Supplier	Copper (Cu)	7440-50-8		0.1074	mg